Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

A Comparison of Lumbar Specific Stabilization Exercises and General Exercises for Reducing Pain and Disability: A Randomized Controlled Trial of Patients with Spondylolysis and Spondylolisthesis

Protocol summary

Summary

The purpose of this study was to compare lumbar muscle specific stabilization exercises with general exercises used for reducing pain and disability among patients with spondylolysis and spondylolisthesis.This single-blind, randomized controlled trial was performed at Zahedan University of Medical Sciences, in 2009. Twenty-four patients with spondylolysis and spondylolisthesis participated through simple non-probability sampling. Patients were selected based on following inclusion criteria: Nonspecific LBP for a period of at least 3 months, participants aged over 18 and less than 80 years old, appropriateness of motor control exercise in accordance with clinical assessment, patients who have not been contraindicated from doing exercise based on PARQ, participants diagnosed with Isthmic Spondylolysis or Spondylolisthesis by specialist, and patients who have not been contraindicated from doing exercise based on the (American College of Sports Medicine) ACSM guidelines. Patients were excluded if they had suspected for spinal pathology, pregnancy, nerve root complications, spinal column surgery, insufficient treatment, using other therapeutic modalities during the study. Subjects were randomly assigned to either the stabilization (N=12) or the general exercise group (N=12). Before and after intervention, we assessed pain (ordinal) through Visual Analogue Scale (VAS), lumbar lordosis (degree) with flexible ruler, range of lumbar flexion (centimeter) using Modified Schober test, and disability (ordinal) with The Oswestry Disability Index (ODI). A 24 session's exercise program which lasted 12 weeks, twice per week, and 30 minutes per session was performed for both groups

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201106231675N6**
Registration date: **2011-09-21, 1390/06/30**
Registration timing: **retrospective**

Last update:
Update count: **0**

Registration date

2011-09-21, 1390/06/30

Registrant information

Name
Asghar Akbari
Name of organization / entity
Zahedan University of Medical Sciences
Country
Iran (Islamic Republic of)
Phone
+98 54 1322 8445
Email address
akbaria@zdmu.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice Chancellor for Research of Zahedan University of Medical Sciences

Expected recruitment start date

2009-04-30, 1388/02/10

Expected recruitment end date

2010-03-11, 1388/12/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title
A Comparison of Lumbar Specific Stabilization Exercises and General Exercises for Reducing Pain and Disability: A Randomized Controlled Trial of Patients with Spondylolysis and Spondylolisthesis

Public title
A Comparison of Lumbar Specific Stabilization Exercises and General Exercises for Reducing Pain and Disability: A Randomized Controlled Trial of Patients with Spondylolysis and Spondylolisthesis

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria: Nonspecific LBP for a period of at least 3 months; Participants aged over 18 and less than 80 years old; Appropriateness of motor control exercise in accordance with clinical assessment; Patients who have not been contraindicated from doing exercise based on PARQ; Participants diagnosed with Isthmic Spondylolysis or Spondylolisthesis by specialist; and Patients who have not been contraindicated from doing exercise based on the (American College of Sports Medicine) ACSM guidelines. Exclusion criteria: Patients suspected for spinal pathology; Pregnancy; Nerve root complications; Spinal column surgery; Insufficient treatment; Using other therapeutic modalities during the study.

Age
From **18 years** old to **80 years** old

Gender
Both

Phase
2

Groups that have been masked
No information

Sample size
Target sample size: **24**

Randomization (investigator's opinion)
Randomized

Randomization description

Blinding (investigator's opinion)
Single blinded

Blinding description

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

1

Registry name
No registration

Secondary trial Id
No trial id

Registration date
empty

Ethics committees

1

Ethics committee

Name of ethics committee
Zahedan University of Medical Sciences

Street address
Deputy of Research, Zahedan University of Medical Sciences, Jannat Blvd., Dr. Hesabi Sq., Zahedan.

City
Zahedan

Postal code

Approval date
2011-07-10, 1390/04/19

Ethics committee reference number
90-874

Health conditions studied

1

Description of health condition studied
Spondylolysis and Spondylolisthesis

ICD-10 code
M43.0 and

ICD-10 code description
Other deforming dorsopathies

Primary outcomes

1

Description
Back pain

Timepoint
Before intervention, 12 weeks after intervention

Method of measurement
Visual Analogue Scale

2

Description
Angle of lumbar lordosis

Timepoint
Before intervention, 12 weeks after intervention

Method of measurement
Flexible ruler

3

Description
Range of lumbar flexion

Timepoint
Before intervention, 12 weeks after intervention

Method of measurement
Modified Schober Test

4

Description
Disability

Timepoint
Before intervention, 12 weeks after intervention
Method of measurement
The Oswestry Disability Index

Secondary outcomes

empty

Intervention groups

1

Description
Lumbar Specific Stabilization Exercises: A 24 session's exercise program which lasted 12 weeks, twice per week, and 30 minutes per session
Category
Rehabilitation

2

Description
General Exercises: Including classic abdominal and back exercises: A 24 session's exercise program which lasted 12 weeks, twice per week, and 30 minutes per session
Category
Rehabilitation

Recruitment centers

1

Recruitment center
Name of recruitment center
Razmejo-Moghadam Physiotherapy Clinic
Full name of responsible person
Dr. Asghar Akbari
Street address
Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo-Moghadam Laboratory, Ayatoallah Kafami St., Zahedan.
City
Zahedan

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Vice Chancellor for Research of Zahedan University of Medical Sciences
Full name of responsible person
Dr. Hamidreza Mahmodzadeh Sagheb
Street address
Deputy 0f Research, Zahedan University of Medical Sciences, Jannat Blvd., Dr. Hesabi Sq., Zahedan.
City
Zahedan
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Vice Chancellor for Research of Zahedan University of Medical Sciences
Proportion provided by this source
100
Public or private sector
empty
Domestic or foreign origin
empty
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
empty

Person responsible for general inquiries

Contact
Name of organization / entity
Zahedan University of Medical Sciences
Full name of responsible person
Dr.Asghar Akbari
Position
Ph.D in Physiotherapy, Head of Dept. of Physiotherapy.
Other areas of specialty/work
Street address
Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo-Moghadam Laboratory, Ayatoallah Kafami St., Zahedan.
City
Zahedan
Postal code
64855-98136
Phone
+98 54 1325 8445
Fax
+98 32 15957
Email
akbari_as@yahoo.com; akbaria@zaums.ac.ir
Web page address
www.zaums.ac.ir

Person responsible for scientific inquiries

Contact
Name of organization / entity
Zahedan University of Medical Sciences
Full name of responsible person
Dr. Asghar Akbari
Position
Head of Dept. of Physiotherapy, Ph.D in Physiotherapy
Other areas of specialty/work
Street address
Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo-Moghadam Laboratory, Ayatoallah Kafami St., Zahedan.

City
Zahedan
Postal code
64855-98136
Phone
+98 54 1322 8445
Fax
+98 54 1321 5957
Email
akbari_as@yahoo.com; akbaria@zaums.ac.ir
Web page address
www.zaums.ac.ir

Person responsible for updating data

Contact
Name of organization / entity
Zahedan University of Medical Sciences
Full name of responsible person
Dr. Asghar Akbari
Position
Ph.D in Physiotherapy, Head of Dept. of Physiotherapy
Other areas of specialty/work
Street address
Dept. of Physiotherapy, School of Rehabilitation Sciences, Razmejo-Moghadam Laboratory, Ayatoallah Kafami St., Zahedan.
City
Zahedan
Postal code
64855-98136
Phone
+98 54 1322 8445
Fax
+98 54 1321 5957
Email
akbari_as@yahoo.com; akbaria@zaums.ac.ir
Web page address
www.zaums.ac.ir

Sharing plan

Deidentified Individual Participant Data Set (IPD)
empty
Study Protocol
empty
Statistical Analysis Plan
empty
Informed Consent Form
empty
Clinical Study Report
empty
Analytic Code
empty
Data Dictionary
empty